

CHAPTER 7

ENERGY REQUIREMENTS AND CONSERVATION POTENTIAL OF THE PROPOSED ACTION

7.1 PROPOSED ACTION

The proposed action would involve one short-term ocean test associated with PSS, lasting a maximum duration of 22 days occurring between mid-August and 30 September 1999, at a specific location off of Southern California. Equipment involved in the test would include two marine vessels, a moored barge, underwater cables, and various subsurface sensory components (as described in Chapter 2).

Energy required to successfully implement the proposed action is minimal, limited only to fuels needed by ocean vessels, the moored barge, and the PSS system, and the shore station vehicles; and electricity required to operate equipment at the proposed shore station. The ocean vessels are owned by the Navy and its contractors and would use existing commercial fuel supplies. These fuels are currently available and are in adequate supply at retail distributors in marinas throughout Southern California. Similarly, fuel for the test barge would be obtained either from Navy-owned sources or from widely available retail distribution.

Electrical power required onboard the vessels and the moored barge would be supplied by an auxiliary power supply (e.g., a generator).

Only a minimal amount of energy is required for implementation of the proposed action; the proposed PSS ocean test is short-term and involves a limited amount of fuel-dependent equipment. Fuels and energy that are required (gasoline and electricity) are mass-produced and widely distributed. Furthermore, energy expended during implementation of the proposed action would likely represent a negligible amount compared to total gasoline and electricity consumed by similar watercraft in the vicinity of the test site during proposed test period.

Direct energy requirements of the proposed action are limited to that necessary to operate equipment. No superfluous use of energy related to the proposed action has been identified, and proposed energy uses have been minimized to the maximum extent possible without compromising the integrity of the PSS ocean test. Therefore, no conservation measures related to direct energy consumption by the proposed action are identified.

7.2 NO-ACTION ALTERNATIVE

Under the No-Action Alternative, no energy would be consumed conducting the PSS ocean test. However, given the availability of fuels and the minor amounts required by the project, the amount of energy consumption related to the proposed action that would be conserved by implementing the No-Action Alternative would be insignificant and negligible.